

INTERNATIONAL SEARCH REPORT

National Application No

1/GB2004/003451

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A63B71/10 A63B33/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 A63B A61F A63C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 93/19814 A (ALPHAX CO LTD ; NITTA YUKUO (JP)) 14 October 1993 (1993-10-14) abstract; figures 1-4 ----- US 5 940 892 A (MORGAN DAVID H) 24 August 1999 (1999-08-24) column 3, line 17 - column 4, line 32; figures 1-6 ----- -/-	1-23, 34-49, 56-62 1,2,6,7, 10-15, 18-23, 33, 35-41, 43,44, 49, 56-58, 61-63
X		

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the International search

21 October 2004

Date of mailing of the International search report

28/10/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Jekabsons, A

INTERNATIONAL SEARCH REPORT

national Application No
T/GB2004/003451

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 537 687 A (GARZA JAIME) 23 July 1996 (1996-07-23) column 8, line 25 - column 9, line 24; figures 7-10 -----	24-49, 56-63
X	US 5 581 822 A (TAGYO AKIKO) 10 December 1996 (1996-12-10) column 2, line 6 - line 67; figures 1-3 -----	50-63
X	US 5 777 712 A (SANSALONE SALVATORE N) 7 July 1998 (1998-07-07) column 3, line 50 - column 5, line 42; figures 1-6 -----	50-63
X	US 2002/071093 A1 (PIEROTTI ELIZABETH M) 13 June 2002 (2002-06-13) paragraphs '0024!, '0025!, '0028!; figure 5 -----	50-57
A	US 4 649 908 A (GHALY MAURICE S) 17 March 1987 (1987-03-17) the whole document -----	1,24

INTERNATIONAL SEARCH REPORT

National Application No

F/GB2004/003451

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 9319814	A 14-10-1993	JP 6015015 A AU 2955992 A WO 9319814 A1		25-01-1994 08-11-1993 14-10-1993
US 5940892	A 24-08-1999	NONE		
US 5537687	A 23-07-1996	CA 2118185 A1		16-04-1995
US 5581822	A 10-12-1996	NONE		
US 5777712	A 07-07-1998	US 5502515 A US 5204700 A AU 8855591 A CA 2122607 A1 WO 9207630 A1 EP 0610182 A1		26-03-1996 20-04-1993 26-05-1992 14-05-1992 14-05-1992 17-08-1994
US 2002071093	A1 13-06-2002	US 6343860 B1 US 2004095551 A1 AU 8466201 A EP 1330675 A1 WO 0219013 A1		05-02-2002 20-05-2004 13-03-2002 30-07-2003 07-03-2002
US 4649908	A 17-03-1987	NONE		